DOCUMENT RESUME

ED 055 106 TM 000 833

AUTHOR Perry, Dallis K.; And Others
TITLE Scholastic Aptitude in Minnesota Colleges--1968.
INSTITUTION Minnesota Univ., Minneapolis. Office for Student Affairs.
PUB DATE 22 Apr 71
NOTE 23p.; v11, n8

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Academic Aptitude; Attendance Patterns; *College Attendance; *College Freshmen; Colleges; *Grade Point Average; Grades (Scholastic); Post High School Guidance; Sex Differences; *State Surveys; Statistical Data
IDENTIFIERS *Minnesota Scholastic Aptitude Test

ABSTRACT

The results of scholastic aptitude surveys of freshmen entering Minnesota colleges in Fall 1965 and Fall 1968, most of whom had been tested as high school juniors in the winters of 1964 and 1967 respectively, are presented. Tables show the distribution of ability of students entering various types of Minnesota colleges. (MS)

ED055106

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

UNIVERSITY OF MINNESOTA

Research Bulletin

of the

Office for Student Affairs

Volume 11, Number 8 April 22, 1971

# SCHOLASTIC APTITUDE IN MINNESOTA COLLEGES--1968

by

Dallis K. Perry, Edward O. Swanson
and E. G. Joselyn

Student Counseling Bureau

University of Minnesota

TM 000 833

## Scholastic Aptitude in Minnesota Colleges--1968[1]

Statewide surveys of scholastic aptitude of Minnesota college freshmen have been conducted periodically since 1937. The results serve to document the levels of academic ability of students entering Minnesota colleges, the distributions of ability among individual colleges and types of colleges, and changes in these distributions as changes have taken place in the nature of educational opportunities available to Minnesota students. The surveys are conducted by the Minnesota College Statewide Testing Program, through which a scholastic aptitude test (currently MSAT--the Minnesota Scholastic Aptitude Test) is administered to virtually every high school student in the junior class of Minnesota high schools. The Statewide Program also collects high school grade averages as a measure of achievement of Minnesota students and reports them to colleges in the form of high school rank (HSR). The program provides the vehicle through which the cooperative efforts of Minnesota colleges combine to make these surveys possible. Results of the surveys through 1959 were summarized by Berdie, Layton, Hagenah, and Swanson (1962), and the following two surveys were reported by Swanson, Merwin, and Berdie (1962, 1965). The current report presents the results of surveys of freshmen entering Minnesota colleges in Fall 1965 and Fall 1968, most of whom had been tested as high school juniors in the Winters of 1964 and 1967 respectively. Included with the information collected on the 1968 students were data on first-term grade average, which were gathered to determine current validities of the scholastic ability measures and to update the expectancy tables that are used to interpret these measures in practical terms for the guidance of

---

[1] Tabulation and analysis of data for this study were under the direction of Mrs. Veronica Schultz, whose assistance is gratefully acknowledged.

students making college plans. The validity coefficients and expectancy tables are presented in a companion report (Perry, Joselyn, and Swanson, 1971). Because sizable groups are needed to provide stable values in expectancy tables, data for 1967 freshmen were combined with the 1968 data for the smaller colleges. The combined data were used in the computations for the present report as well, and results for combined years are noted in the tables.

## Procedure

In 1968 the president of each college in the Association of Minnesota Colleges was contacted with a request to participate in the survey and validation study and to indicate the person who would be responsible for supplying information from the college. The follow-up request for the data went to the colleges in April 1969. Data for the state junior colleges were obtained, after initial approval from each president, from the central computer file for the junior college system. Colleges either supplied complete data on each student without identifying individual students or supplied student names, high schools, and graduation dates so that HSR and MSAT scores could be obtained from Statewide Testing Program files. Data were obtained from all colleges in the Association except Lea College, Minneapolis School of Art, and the College of St. Teresa.

Not all students in Minnesota colleges are from Minnesota high schools, of course. As Table 1 shows, however, Minnesota students make up most of the freshmen in all state-supported systems and a majority of those in the private colleges as well. Table 1 also shows the total number of Minnesota students in the study (including the 1967 freshmen in the smaller colleges)

and numbers for whom HSR and MSAT data were available. In most schools the results should be reasonably representative of the entire freshman class of 1968.

## Results

### Types of College

Means and standard deviations of HSR and MSAT raw scores for the 1968 freshmen are given by sex and by type of college in Table 2.1. For comparison the same statistics are shown for 1966-67 high school juniors, the class from which most of the freshmen came. As in previous surveys, the liberal arts college students show the highest scholastic aptitude indices and the junior college students the lowest; and the female students have higher average scores than the male students in general and in each type of college except the private junior colleges. The latter make up a small, heterogeneous group of small colleges, some of which are rather specialized. Only two of the five are co-educational, and the men's colleges are specialized in different ways than the women's and therefore draw quite different kinds of students. The college-going students score higher on MSAT (mean score at the 71st percentile on high school junior norms) than on HSR (mean=64), and the difference between males and females is less marked (67th and 73rd percentiles respectively) on MSAT than on HSR (58 and 70).

Although there are marked differences in average scholastic ability scores among types of colleges, the standard deviations indicate substantial overlap as well. Both the differences and the overlapping are displayed in Fig. 1.1 and 1.2, which portray the mean, mid-third range, and total range for each type of college. In these figures the two-year colleges (GC, Crook-

ston) and the four-year colleges of the University of Minnesota are shown separately.

Similar data for 1965 freshmen are shown in Table 2.2, although the state and private junior colleges are not separated in the 1965 analysis. Comparison of the two tables shows slight increases in scores of male freshmen in the state colleges and university and decreases in scores of state junior college freshmen of both sexes. The trends suggested by these changes seem to be continuations of tendencies that can be noted in earlier reports (Swanson, et al, 1962, 1965). Mean scores of the liberal arts college freshmen have been virtually constant since the 1961 class, and the scores of the junior college students have been declining since then. The increase in state college and university males' scores began with the 1965 freshmen.

The 1968 data show, for the first time, a small decline, slightly greater for females than for males, in the average scholastic aptitude indices for all Minnesota college freshmen. The change is clearly due to the combination of declining scores and markedly greater enrollments in the junior colleges while both enrollments and scholastic aptitude indices in other segments of the educational system remained more constant. There is a suggestion, in the pattern of changes, of a slight break in the traditional tendency of fewer girls than boys at a given level of ability to attend college. This is seen also in the fact that 46 percent of the 1968 freshmen were females, whereas the percentage was 43 in the 1961, 1963, and 1965 groups.

The differences among types of colleges indicate that MSAT norms by type of college, in addition to the statewide entering freshmen norms,

would be useful; and they are presented in Table 3. Such norms must be used with full realization of the variation among institutions within each type, as shown in the next section.

Individual Colleges

Means and standard deviations of 1968 HSR and MSAT scores for Minnesota freshmen in individual colleges are given by sex in Tables 4.1-4.5. The state colleges are quite similar to each other, but within each of the other types there is considerable variety. Entering freshmen at several of the junior colleges and several of the liberal arts colleges are more similar in scholastic ability to freshmen in state colleges than to those in the average colleges in their own groups. The University of Minnesota, with both two-year and four-year colleges, includes average scores among both the lowest and the highest. The results reflect the diversity of educational opportunities available to Minnesota students, not only in different components of the educational system, but within each component as well.

Attendance Patterns

Tables 5.1 and 5.2 present somewhat different information, showing the proportions of 1966-67 Minnesota high school juniors in each decile of scholastic ability who entered Minnesota colleges in the Fall of 1968, by type of college. Percentages based on HSR in Table 5.1 are quite similar to those based on MSAT in Table 5.2. They show a total of 36 percent of the juniors--33 percent of the girls and 38 percent of the boys--entering a Minnesota college in the Fall after their high school graduation. About 70 percent of the boys and 62-64 percent of the girls in the top decile of each measure entered a Minnesota college, whereas only 6-8 percent of students in the bottom deciles did so. More than half the boys in the top

four deciles and about half of those in the next decile entered college, but only in the top two deciles were more than half of the girls in the college group.

The University receives the largest proportions of students in the top three deciles, the state colieges the largest proportions in the next four, and the junior colleges the largest proportions in the lower three deciles. This pattern varies somewhat betwen males and females, with the state colleges drawing somewhat larger proportions of high ability girls than boys. Very few students from the lower half of the distributions entered liberal arts colleges, but there are students from each decile in each type of college. The junior colleges draw quite evenly from the entire range, though somewhat more heavily from the middle than from either the high or low deciles.

## References

Berdie, R. F., Layton, W. L., Hagenah, T., and Swanson, E. O. Who goes to college? Minnesota Studies in Student Personnel Work, No. 12. Minneapolis: University of Minnesota Press, 1962.

Perry, D. K., Joselyn, E. G., and Swanson, E. O. Predicting grades of Minnesota high school students. OSA Research Bulletin, Vol. 11, No. 7. University of Minnesota, April 1971.

Swanson, E. O., Merwin, J. C., and Berdie, R. F. A survey of scholastic aptitude in Minnesota colleges. ODS Research Bulletin, Vol. 4, No. 2. University of Minnesota, December 1962.

Swanson, E. O., Merwin, J. C., and Berdie, R. F. A survey of scholastic aptitude in Minnesota colleges. ODS Research Bulletin, Vol. 7, No. 1. University of Minnesota, March 1965.

TABLE I

Completeness of Data on
Minnesota College Freshmen

| Type of College | 1968 Entering Freshmen[1] | Minnesota Freshmen 1968 N | % | Total in Study[2] | HSR Available N | % | MSAT Available N | % |
|---|---|---|---|---|---|---|---|---|
| Lib. Arts | 6497 | 3800 | 58 | 4476 | 4220 | 94 | 4232 | 95 |
| U of M | 8665 | 8427 | 97 | 8496 | 7979 | 94 | 7919 | 93 |
| St. Coll | 8438 | 7558 | 90 | 7558 | 7359 | 97 | 6884 | 91 |
| St. JC | 9147 | 8405 | 92 | 8405 | 6992 | 84 | 6272 | 75 |
| Pr. JC | 484 | 363 | 75 | 548 | 483 | 88 | 431 | 79 |

[1] From "Fifteenth Annual Survey of Minnesota College and University Enrollments". Minnesota Higher Education Coordinating Commission, November 1968.

[2] Includes 1967 freshmen in small colleges.

TABLE 2.1

Means and Standard Deviations of High School Rank and MSAT Score for 1966-67 High School Juniors and 1968 Minnesota College Freshmen[1] by Type of College

| Type of College | HSR N | HSR Mean | HSR S.D. | MSAT-C Raw Score N | MSAT-C Raw Score Mean | MSAT-C Raw Score S.D. |
|---|---|---|---|---|---|---|
| | | | Males | | | |
| Liberal Arts | 2,098 | 72.67 | 22.68 | 2,076 | 45.99 | 11.51 |
| U of M | 4,461 | 66.95 | 24.43 | 4,403 | 42.39 | 12.07 |
| St. Coll | 3,621 | 54.83 | 23.01 | 3,346 | 35.57 | 10.41 |
| St. JC | 4,229 | 43.40 | 24.12 | 3,831 | 32.04 | 11.19 |
| Priv JC | 149 | 49.15 | 26.27 | 142 | 36.85 | 13.04 |
| Total | 14,558 | 58.08 | 27.32 | 13,798 | 38.35 | 14.24 |
| HS Jrs | 32,182 | 44.41 | 28.59 | 31,849 | 31.85 | 13.40 |
| | | | Females | | | |
| Liberal Arts | 2,122 | 82.52 | 15.03 | 2,156 | 48.25 | 11.54 |
| U of M | 3,518 | 74.36 | 21.00 | 3,516 | 44.76 | 12.37 |
| St. Coll. | 3,738 | 68.10 | 21.18 | 3,516 | 44.76 | 12.37 |
| St. JC | 2,763 | 59.51 | 23.81 | 2,441 | 35.03 | 11.51 |
| Priv JC | 334 | 55.23 | 25.07 | 289 | 34.51 | 12.30 |
| Total | 12,475 | 70.04 | 22.65 | 11,940 | 41.34 | 12.64 |
| HS Jrs | 31,229 | 55.88 | 28.03 | 30,934 | 33.94 | 13.74 |
| | | | Males and Females | | | |
| Liberal Arts | 4,220 | 77.57 | 19.89 | 4,232 | 47.14 | 11.58 |
| U of M | 7,979 | 70.44 | 23.32 | 7,919 | 43.44 | 12.26 |
| St. Coll | 7,359 | 61.57 | 23.08 | 6,884 | 37.13 | 10.88 |
| St. JC | 6,992 | 49.77 | 25.16 | 6,272 | 33.21 | 11.41 |
| Priv JC | 483 | 53.35 | 25.57 | 431 | 35.28 | 12.58 |
| Total | 27,033 | 63.60 | 25.95 | 25,738 | 39.74 | 13.60 |
| HS Jrs | 63,411 | 50.06 | 28.89 | 62,783 | 32.88 | 13.61 |

[1] Includes 1967 freshmen in small colleges

TABLE 2.2

Means and Standard Deviations of High School Rank and MSAT Score for 1965 Minnesota College Freshmen by Type of College

| Type of College | HSR N | HSR Mean | HSR S.D. | MSAT-A Raw Score N | MSAT-A Raw Score Mean | MSAT-A Raw Score S.D. |
|---|---|---|---|---|---|---|
| | | | Males | | | |
| Liberal Arts | 2,081 | 73.19 | 21.43 | 2,058 | 48.31 | 13.18 |
| U of M | 5,166 | 64.79 | 24.72 | 5,215 | 43.66 | 13.67 |
| St. Coll | 3,522 | 52.05 | 22.93 | 3,489 | 35.14 | 11.39 |
| Junior Coll | 2,406 | 47.44 | 24.43 | 2,358 | 34.43 | 12.19 |
| Total | 13,175 | 59.43 | 25.50 | 13,120 | 40.38 | 12.91 |
| | | | Females | | | |
| Liberal Arts | 2,184 | 80.82 | 18.34 | 2,167 | 50.72 | 13.28 |
| U of M | 2,606 | 74.28 | 21.53 | 3,634 | 46.58 | 13.44 |
| St. Coll | 2,825 | 67.83 | 21.83 | 2,799 | 40.01 | 12.50 |
| Junior Coll | 1,391 | 63.49 | 24.52 | 1,382 | 39.01 | 14.46 |
| Total | 10,006 | 72.37 | 22.22 | 9.982 | 44.58 | 14.04 |
| | | | Males and Females | | | |
| Liberal Arts | 5,265 | 77.09 | 20.27 | 4,225 | 49.55 | 13.28 |
| U of M | 3.772 | 68.69 | 23.92 | 8,849 | 44.86 | 13.62 |
| St. Coll | 6,347 | 59.07 | 23.78 | 6,288 | 37.31 | 12.14 |
| Junior Coll | 3.797 | 53.37 | 25.66 | 3,740 | 36.14 | 13.27 |
| Total | 23,181 | 65.01 | 24.98 | 23,102 | 42.20 | 14.12 |

TABLE 3

Minnesota Scholastic Aptitude Test Norms for
High School Juniors and Entering College Freshmen
1968

| Percentile | Four-yr. Lib Arts | U of M Four-yr Coll | State Colleges | Junior Colleges | HS Juniors |
|---|---|---|---|---|---|
| 99 | 68-75 | 67-75 | 61-75 | 60-75 | 64-75 |
| 98 | 67 | 66 | 59-60 | 58-59 | 61-63 |
| 95 | 65 | 64 | 56 | 53 | 57 |
| 90 | 63 | 61 | 52 | 49 | 52 |
| 80 | 58 | 56 | 46 | 43 | 45 |
| 75 | 56 | 54 | 44 | 41 | 42 |
| 70 | 54 | 52 | 43 | 39 | 39 |
| 60 | 51 | 48 | 39 | 35 | 35 |
| 50 | 47 | 45 | 36 | 32 | 31 |
| 40 | 44 | 42 | 34 | 29 | 27 |
| 30 | 40 | 39 | 31 | 26 | 24 |
| 25 | 39 | 38 | 29 | 25 | 22 |
| 20 | 37 | 36 | 27 | 23 | 20 |
| 10 | 31 | 32 | 24 | 19 | 16 |
| 5 | 27 | 27 | 20 | 16 | 14 |
| 2 | 21-23 | 20-23 | 16-17 | 13 | 11 |
| 1 | 0-20 | 0-19 | 0-15 | 0-12 | 0-10 |

TABLE 4.1

Means and Standard Deviations of High School Rank and MSAT Score for 1968 Minnesota Liberal Arts College Freshmen

| College Code | HSR | | | MSAT-C Raw Score | | |
|---|---|---|---|---|---|---|
| | N | Mean | S.D. | N | Mean | S.D. |
| | | | Males | | | |
| 1 | 184 | 73.61 | 19.67 | 184 | 45.80 | 9.73 |
| 2 | 103[1] | 71.50 | 22.11 | 103 | 42.39 | 10.95 |
| 3 | 73 | 91.96 | 8.25 | 73 | 59.42 | 7.83 |
| 4 | 201 | 71.74 | 18.86 | 199 | 42.14 | 11.12 |
| 5 | 96[1] | 60.75 | 25.60 | 98 | 38.22 | 13.71 |
| 6 | 198 | 79.19 | 15.70 | 226 | 46.74 | 10.61 |
| 7 | 114 | 81.01 | 15.41 | 114 | 45.85 | 10.39 |
| 8 | 129 | 86.47 | 11.40 | 141 | 53.62 | 9.41 |
| 12 | 289 | 75.99 | 19.26 | 248 | 47.25 | 9.59 |
| 13 | 143[1] | 64.20 | 23.20 | 125 | 40.82 | 13.13 |
| 14 | 192 | 84.27 | 15.41 | 192 | 51.29 | 9.38 |
| 17 | 325 | 62.75 | 23.42 | 321 | 44.84 | 10.22 |
| 18 | 16 | 52.00 | 25.70 | 16 | 38.94 | 12.17 |
| 20 | 35 | 51.37 | 21.86 | 36 | 34.03 | 11.26 |
| Total | 2098 | 72.67 | 22.68 | 2076 | 45.99 | 11.50 |
| | | | Females | | | |
| 1 | 211 | 86.09 | 12.90 | 211 | 52.01 | 8.97 |
| 2 | 140[1] | 80.23 | 15.09 | 141 | 44.17 | 11.27 |
| 3 | 23 | 96.52 | 4.43 | 24 | 63.00 | 5.49 |
| 4 | 227 | 81.05 | 15.84 | 222 | 45.16 | 10.64 |
| 5 | 120[1] | 71.49 | 21.36 | 120 | 40.38 | 11.20 |
| 6 | 237 | 84.50 | 11.58 | 251 | 49.41 | 10.09 |
| 7 | 111 | 82.62 | 13.27 | 111 | 47.76 | 10.50 |
| 8 | 143 | 90.67 | 9.11 | 153 | 58.28 | 7.74 |
| 10 | 275[1] | 75.51 | 20.66 | 269 | 46.38 | 10.01 |
| 11 | 219 | 82.84 | 17.50 | 220 | 51.46 | 10.77 |
| 14 | 151 | 91.33 | 7.81 | 151 | 55.90 | 8.62 |
| 15 | 173[1] | 76.38 | 21.06 | 187 | 42.01 | 10.82 |
| 18 | 41[1] | 73.39 | 24.97 | 45 | 47.69 | 11.45 |
| 20 | 51[1] | 64.47 | 22.97 | 51 | 34.43 | 11.47 |
| Total | 2122 | 82.52 | 15.03 | 2156 | 48.25 | 11.54 |

TABLE 4.1 (cont.)

Means and Standard Deviations of High School Rank
and MSAT Score for 1968 Minnesota
Liberal Arts College Freshmen

| College Code | HSR | | | MSAT-C Raw Score | | |
|---|---|---|---|---|---|---|
| | N | Mean | S.D. | N | Mean | S.D. |
| | | Males and Females | | | | |
| 1 | 395 | 80.28 | 17.53 | 395 | 49.12 | 9.83 |
| 2 | 243[1] | 76.53 | 18.85 | 244 | 43.42 | 11.15 |
| 3 | 96 | 93.05 | 7.74 | 97 | 60.31 | 7.46 |
| 4 | 428 | 76.86 | 17.89 | 421 | 43.73 | 10.96 |
| 5 | 216[1] | 67.44 | 25.05 | 218 | 39.36 | 12.45 |
| 6 | 435 | 82.08 | 13.85 | 477 | 48.15 | 10.42 |
| 7 | 225 | 81.80 | 14.38 | 225 | 46.79 | 10.46 |
| 8 | 272 | 88.68 | 10.46 | 294 | 56.04 | 8.88 |
| 10 | 275[1] | 75.51 | 19.38 | 269 | 46.38 | 10.01 |
| 11 | 219 | 82.84 | 17.50 | 220 | 51.46 | 10.77 |
| 12 | 289 | 75.99 | 19.26 | 248 | 47.25 | 9.59 |
| 13 | 143[1] | 64.20 | 23.20 | 125 | 40.82 | 13.13 |
| 14 | 343 | 87.38 | 13.11 | 343 | 53.32 | 9.32 |
| 15 | 173[1] | 76.38 | 21.06 | 187 | 42.01 | 10.82 |
| 17 | 325 | 62.75 | 23.42 | 321 | 44.84 | 10.22 |
| 18 | 57[1] | 67.39 | 26.77 | 61 | 45.39 | 12.17 |
| 20 | 86[1] | 59.14 | 23.31 | 87 | 34.26 | 11.32 |
| Total | 4220 | 77.57 | 19.89 | 42.32 | 47.14 | 11.58 |

---

[1] 1967 students included

TABLE 4.2

Means and Standard Deviations of High School Rank
and MSAT Raw Score for 1968
University of Minnesota Freshmen

| College | HSR N | HSR Mean | HSR S.D. | MSAT-C Raw Score N | MSAT-C Raw Score Mean | MSAT-C Raw Score S.D. |
|---|---|---|---|---|---|---|
| | | | Males | | | |
| AFHE | 274 | 71.01 | 16.58 | 243 | 39.92 | 10.06 |
| CLA | 1871 | 73.80 | 17.88 | 1897 | 47.03 | 9.69 |
| Crookston[1] | 157 | 41.75 | 21.88 | 130 | 29.52 | 10.42 |
| Duluth | 748 | 59.62 | 24.68 | 728 | 37.98 | 11.15 |
| Education[1,2] | 21 | 69.86 | 16.04 | 22 | 43.36 | 9.12 |
| GC | 534 | 32.20 | 18.36 | 531 | 28.31 | 7.76 |
| IT | 614 | 85.93 | 12.44 | 614 | 48.73 | 10.39 |
| Morris | 242 | 76.62 | 15.70 | 238 | 44.09 | 9.15 |
| Total | 4461 | 66.95 | 24.43 | 4403 | 42.39 | 12.07 |
| | | | Females | | | |
| AFHE | 198 | 77.16 | 16.31 | 182 | 42.55 | 11.66 |
| CLA | 2062 | 79.42 | 15.98 | 2088 | 48.63 | 10.30 |
| Crookston[1] | 20 | 63.05 | 27.39 | 21 | 34.10 | 12.50 |
| Dent Hyg[1] | 31 | 83.56 | 17.29 | 31 | 51.13 | 7.71 |
| Duluth | 621 | 75.25 | 19.97 | 606 | 41.73 | 11.80 |
| Education[1,2] | 50 | 79.68 | 14.85 | 50 | 40.22 | 9.89 |
| GC | 334 | 37.77 | 20.08 | 337 | 27.03 | 8.50 |
| IT | 26 | 90.35 | 9.63 | 26 | 55.23 | 9.47 |
| Morris | 176 | 83.14 | 14.74 | 175 | 45.58 | 10.77 |
| Total | 3518 | 74.86 | 21.00 | 3516 | 44.76 | 12.37 |
| | | | Males and Females | | | |
| AFHE | 472 | 73.59 | 16.73 | 425 | 41.04 | 10.84 |
| CLA | 3933 | 76.75 | 17.14 | 3985 | 47.74 | 10.02 |
| Crookston[1] | 177 | 44.15 | 23.47 | 151 | 30.16 | 10.80 |
| Dent Hyg[1] | 31 | 83.56 | 17.29 | 31 | 51.13 | 7.71 |
| Duluth | 1369 | 66.36 | 23.99 | 1334 | 39.31 | 11.64 |
| Education[1,2] | 71 | 76.77 | 15.76 | 72 | 41.18 | 9.71 |
| GC | 868 | 34.35 | 19.22 | 868 | 27.82 | 8.08 |
| IT | 640 | 86.11 | 12.37 | 640 | 48.94 | 10.49 |
| Morris | 418 | 79.37 | 15.62 | 413 | 44.67 | 10.01 |
| Total | 7979 | 70.44 | 23.32 | 7919 | 43.44 | 12.26 |

---

[1] 1967 students included
[2] The College of Education accepts freshmen only in the Physical Education and Recreation Leadership programs.

TABLE 4.3

Means and Standard Deviations of High School Rank
and MSAT Scores for 1968 Minnesota
State College Freshmen

| College Code | HSR | | | MSAT Raw Score | | |
|---|---|---|---|---|---|---|
| | N | Mean | S.D. | N | Mean | S.D. |
| | | | Males | | | |
| 1 | 466 | 53.77 | 22.78 | 391 | 34.23 | 10.11 |
| 2 | 943 | 50.52 | 25.17 | 935 | 34.58 | 10.49 |
| 3 | 426 | 59.15 | 21.20 | 429 | 37.18 | 10.24 |
| 4 | 999 | 59.05 | 22.30 | 950 | 37.18 | 10.30 |
| 5 | 328 | 52.27 | 21.94 | 279 | 33.11 | 9.98 |
| 6 | 359 | 53.47 | 22.54 | 362 | 35.30 | 10.51 |
| Total | 3621 | 54.83 | 23.01 | 3346 | 35.57 | 10.41 |
| | | | Females | | | |
| 1 | 433 | 69.48 | 21.39 | 368 | 37.61 | 11.30 |
| 2 | 1106 | 63.42 | 23.19 | 1091 | 37.09 | 11.11 |
| 3 | 454 | 71.55 | 18.60 | 460 | 39.39 | 10.83 |
| 4 | 1076 | 72.24 | 18.67 | 1035 | 40.87 | 10.72 |
| 5 | 420 | 65.77 | 20.87 | 368 | 37.13 | 11.21 |
| 6 | 249 | 65.18 | 22.71 | 216 | 38.01 | 11.04 |
| Total | 3738 | 68.10 | 21.18 | 3538 | 38.61 | 11.10 |
| | | | Males and Females | | | |
| 1 | 899 | 61.33 | 23.47 | 759 | 35.87 | 10.83 |
| 2 | 2049 | 57.48 | 24.51 | 2026 | 35.94 | 10.90 |
| 3 | 880 | 65.66 | 20.83 | 889 | 38.32 | 10.60 |
| 4 | 2075 | 65.89 | 21.53 | 1985 | 39.10 | 10.68 |
| 5 | 748 | 59.85 | 22.37 | 647 | 35.40 | 10.87 |
| 6 | 708 | 57.59 | 23.28 | 578 | 36.31 | 10.78 |
| Total | 7359 | 61.57 | 23.08 | 6884 | 37.13 | 10.88 |

TABLE 4.4

Means and Standard Deviations of High School Rank and MSAT Scores for 1968 Minnesota State Junior College Freshmen

| College Code | HSR | | | MSAT Raw Scores | | |
|---|---|---|---|---|---|---|
| | N | Mean | S.D. | N | Mean | S.D. |
| | | | Males | | | |
| 1 | 272 | 48.57 | 26.38 | 243 | 33.82 | 12.59 |
| 3 | 113 | 49.65 | 24.40 | 118 | 32.69 | 11.93 |
| 4 | 78 | 42.27 | 25.41 | 69 | 33.77 | 11.53 |
| 6 | 146 | 40.60 | 23.27 | 143 | 32.44 | 12.00 |
| 7 | 173 | 50.83 | 25.60 | 170 | 34.10 | 11.22 |
| 8 | 168 | 44.15 | 25.08 | 152 | 30.84 | 12.52 |
| 9 | 451 | 44.43 | 23.87 | 375 | 33.38 | 11.61 |
| 10 | 203 | 52.01 | 25.42 | 218 | 37.17 | 11.73 |
| 11 | 174 | 42.43 | 23.69 | 198 | 31.43 | 10.73 |
| 12 | 235 | 44.76 | 25.75 | 154 | 31.59 | 10.70 |
| 15 | 212 | 36.07 | 22.33 | 191 | 29.62 | 11.09 |
| 16 | 88 | 49.56 | 25.13 | 84 | 32.02 | 11.73 |
| 17 | 499 | 43.39 | 23.17 | 460 | 30.73 | 10.57 |
| 18 | 436 | 42.86 | 22.67 | 392 | 30.27 | 9.83 |
| 19 | 518 | 39.62 | 22.70 | 464 | 31.58 | 10.42 |
| 20 | 405 | 44.15 | 22.36 | 349 | 30.98 | 10.27 |
| 21 | 58 | 52.28 | 25.77 | 51 | 33.18 | 11.62 |
| Total | 4229 | 43.40 | 24.12 | 3831 | 32.04 | 11.19 |
| | | | Females | | | |
| 1 | 198 | 63.88 | 24.57 | 169 | 38.86 | 11.83 |
| 3 | 81 | 65.25 | 22.61 | 79 | 34.14 | 11.78 |
| 4 | 42 | 68.33 | 21.59 | 36 | 38.14 | 11.29 |
| 6 | 90 | 63.77 | 23.38 | 77 | 37.31 | 12.46 |
| 7 | 177 | 64.96 | 22.81 | 173 | 39.84 | 12.20 |
| 8 | 107 | 55.88 | 25.08 | 97 | 34.12 | 12.48 |
| 9 | 462 | 61.80 | 23.23 | 352 | 36.96 | 11.56 |
| 10 | 146 | 63.70 | 19.99 | 157 | 38.40 | 11.78 |
| 11 | 83 | 58.16 | 22.61 | 83 | 34.60 | 11.13 |
| 12 | 113 | 57.92 | 24.94 | 76 | 34.45 | 10.05 |
| 15 | 123 | 47.91 | 24.35 | 109 | 29.08 | 9.78 |
| 16 | 51 | 60.98 | 24.55 | 49 | 35.51 | 11.56 |
| 17 | 300 | 58.88 | 22.70 | 272 | 32.44 | 10.24 |
| 18 | 233 | 58.42 | 23.92 | 210 | 33.28 | 11.29 |
| 19 | 278 | 51.88 | 23.71 | 256 | 34.55 | 11.09 |
| 20 | 225 | 57.53 | 23.29 | 204 | 32.46 | 10.19 |
| 21 | 54 | 65.70 | 26.02 | 42 | 33.98 | 11.05 |
| Total | 2763 | 59.51 | 23.81 | 2441 | 35.03 | 11.51 |

TABLE 4.4 (cont.)

Means and Standard Deviations of High School Rank
and MSAT Scores for 1968 Minnesota State
Junior College Freshmen

| College Code | HSR | | | MSAT Raw Scores | | |
|---|---|---|---|---|---|---|
| | N | Mean | S.D. | N | Mean | S.D. |
| | | | Males and Females | | | |
| 1 | 470 | 55.02 | 26.70 | 412 | 35.07 | 12.36 |
| 3 | 194 | 56.16 | 24.84 | 197 | 33.27 | 11.87 |
| 4 | 120 | 51.39 | 27.10 | 105 | 35.27 | 11.58 |
| 6 | 236 | 49.44 | 25.85 | 220 | 34.15 | 12.36 |
| 7 | 350 | 57.94 | 25.21 | 343 | 37.00 | 12.05 |
| 8 | 275 | 48.71 | 25.68 | 249 | 32.12 | 12.58 |
| 9 | 913 | 53.22 | 25.08 | 727 | 35.11 | 11.72 |
| 10 | 349 | 56.90 | 23.98 | 375 | 37.69 | 11.75 |
| 11 | 257 | 47.51 | 24.44 | 281 | 32.37 | 10.93 |
| 12 | 348 | 49.03 | 26.19 | 230 | 32.53 | 10.55 |
| 15 | 335 | 40.46 | 23.73 | 300 | 29.42 | 10.62 |
| 16 | 139 | 53.75 | 25.44 | 133 | 33.31 | 11.74 |
| 17 | 799 | 49.20 | 24.18 | 732 | 31.36 | 10.47 |
| 18 | 669 | 48.28 | 24.26 | 602 | 31.32 | 10.45 |
| 19 | 796 | 43.90 | 23.77 | 720 | 32.63 | 10.75 |
| 20 | 630 | 48.93 | 23.57 | 553 | 31.52 | 10.26 |
| 21 | 112 | 58.75 | 26.64 | 93 | 33.54 | 11.31 |
| Total | 6992 | 49.77 | 25.16 | 6272 | 33.21 | 11.41 |

TABLE 4.5

Means and Standard Deviations of High School Rank and MSAT Score for 1968 Minnesota Private Junior College Freshmen

| College Code | HSR N | HSR Mean | HSR S.D. | MSAT-C Raw Score N | MSAT-C Raw Score Mean | MSAT-C Raw Score S.D. |
|---|---|---|---|---|---|---|
| | | | Males | | | |
| 2 | 32[1] | 61.47 | 23.57 | 36 | 38.19 | 12.54 |
| 14 | 46[1] | 54.50 | 27.08 | 47 | 44.36 | 11.80 |
| 23 | 71 | 40.13 | 23.89 | 59 | 30.05 | 10.68 |
| Total | 149 | 49.15 | 26.27 | 142 | 36.85 | 13.04 |
| | | | Females | | | |
| 2[1] | 39 | 66.95 | 25.16 | 41 | 39.59 | 12.71 |
| 13 | 24 | 52.75 | 26.85 | 24 | 33.12 | 14.49 |
| 22 | 172 | 54.73 | 24.04 | 140 | 33.93 | 10.24 |
| 23 | 99 | 52.08 | 25.30 | 84 | 33.39 | 14.08 |
| Total | 334 | 55.23 | 25.07 | 289 | 34.51 | 12.30 |
| | | | Males and Females | | | |
| 2[1] | 71 | 64.48 | 24.44 | 77 | 38.94 | 12.57 |
| 13 | 24 | 52.75 | 26.85 | 24 | 33.12 | 14.49 |
| 14[1] | 46 | 54.50 | 27.08 | 47 | 44.36 | 11.80 |
| 22 | 172 | 54.74 | 24.04 | 140 | 33.93 | 10.24 |
| 23 | 170 | 47.09 | 25.34 | 143 | 32.01 | 12.85 |
| Total | 483 | 53.35 | 25.57 | 431 | 35.28 | 12.58 |

[1] 1967 students included

TABLE 5.1

Percentages of Minnesota High School Juniors of 1967 Entering Minnesota Colleges in Fall 1968 by High School Rank

| ISR Decile | Four-Year Liberal Arts N | % | U of M N | % | State Colleges N | % | State JC N | % | Private JC N | % | Total All Colleges N | % | 66-67 HS Juniors N | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Males | | | | | | | | |
| 10 | 503 | 21.8 | 786 | 34.1 | 200 | 8.7 | 115 | 5.0 | 7 | .3 | 1611 | 69.9 | 2303 | 7.2 |
| 9 | 384 | 16.2 | 767 | 32.3 | 324 | 13.6 | 187 | 7.8 | 3 | .1 | 1665 | 70.0 | 2377 | 7.4 |
| 8 | 281 | 10.7 | 647 | 24.7 | 404 | 15.4 | 279 | 10.6 | 6 | .2 | 1617 | 61.6 | 2622 | 8.1 |
| 7 | 223 | 7.9 | 493 | 17.5 | 460 | 16.3 | 363 | 12.0 | 7 | .2 | 1546 | 54.9 | 2815 | 8.7 |
| 6 | 159 | 5.4 | 428 | 14.5 | 462 | 15.6 | 389 | 13.2 | 6 | .2 | 1444 | 48.9 | 2955 | 9.2 |
| 5 | 121 | 3.6 | 289 | 8.7 | 447 | 13.5 | 430 | 13.0 | 3 | .1 | 1290 | 38.9 | 3320 | 10.3 |
| 4 | 65 | 1.8 | 200 | 5.5 | 422 | 11.7 | 476 | 13.2 | 8 | .2 | 1171 | 32.4 | 3611 | 11.2 |
| 3 | 38 | 1.0 | 156 | 4.2 | 229 | 6.2 | 401 | 10.8 | 5 | .1 | 829 | 22.4 | 3702 | 11.5 |
| 2 | 24 | .6 | 330 | 2.9 | 148 | 3.7 | 330 | 8.2 | 11 | .2 | 630 | 15.6 | 4036 | 12.5 |
| 1 | 9 | .2 | 58 | 1.3 | 69 | 1.6 | 201 | 4.5 | 2 | .1 | 339 | 7.6 | 4441 | 13.8 |
| otal | 1807 | 5.6 | 3941 | 12.2 | 3165 | 9.8 | 3171 | 9.9 | 58 | .2 | 12142 | 37.7 | 32182 | 100.0 |
| | | | | | | Females | | | | | | | | |
| 10 | 716 | 19.2 | 886 | 23.8 | 504 | 13.5 | 179 | 4.8 | 21 | .6 | 2306 | 61.9 | 3726 | 11.9 |
| 9 | 411 | 10.4 | 717 | 18.1 | 693 | 17.5 | 311 | 7.9 | 16 | .4 | 2148 | 54.3 | 3956 | 12.7 |
| 8 | 236 | 6.4 | 510 | 13.9 | 541 | 14.7 | 278 | 7.6 | 19 | .5 | 1584 | 43.1 | 3674 | 11.8 |
| 7 | 131 | 3.7 | 366 | 10.3 | 510 | 14.4 | 299 | 8.4 | 21 | .6 | 1327 | 37.3 | 3553 | 11.4 |
| 6 | 63 | 1.9 | 223 | 6.8 | 429 | 13.0 | 283 | 8.6 | 18 | .5 | 1016 | 30.9 | 3292 | 10.5 |
| 5 | 47 | 1.5 | 172 | 5.5 | 275 | 8.9 | 269 | 8.7 | 32 | 1.1 | 796 | 25.6 | 3105 | 9.9 |
| 4 | 20 | .7 | 84 | 3.0 | 177 | 6.4 | 193 | 6.9 | 21 | .8 | 495 | 17.8 | 2788 | 8.9 |
| 3 | 12 | .4 | 58 | 2.1 | 111 | 4.0 | 151 | 5.4 | 19 | .7 | 351 | 13.4 | 2626 | 8.4 |
| 2 | 4 | .2 | 47 | 2.0 | 60 | 2.6 | 88 | 3.8 | 9 | .4 | 208 | 9.0 | 2321 | 7.4 |
| 1 | 4 | .2 | 24 | 1.1 | 22 | 1.0 | 66 | 3.0 | 7 | .3 | 123 | 5.6 | 2188 | 7.0 |
| otal | 1644 | 5.3 | 3087 | 9.9 | 3322 | 10.6 | 2117 | 6.8 | 184 | .5 | 10354 | 33.2 | 31229 | 100.0 |
| | | | | | | Males and Females | | | | | | | | |
| 10 | 1219 | 20.2 | 1672 | 27.7 | 704 | 11.7 | 294 | 4.9 | 28 | .5 | 3917 | 65.0 | 6029 | 9.5 |
| 9 | 795 | 12.6 | 1484 | 23.4 | 1017 | 16.1 | 498 | 7.9 | 19 | .3 | 3813 | 60.2 | 6333 | 10.0 |
| 8 | 517 | 8.2 | 1157 | 18.4 | 945 | 15.0 | 557 | 8.8 | 25 | .4 | 3201 | 50.8 | 6296 | 9.9 |
| 7 | 354 | 5.6 | 859 | 13.5 | 970 | 15.2 | 662 | 10.4 | 28 | .4 | 2873 | 45.7 | 6368 | 10.0 |
| 6 | 222 | 3.6 | 651 | 10.4 | 891 | 14.3 | 672 | 10.8 | 24 | .4 | 2460 | 39.4 | 6247 | 9.9 |
| 5 | 168 | 2.6 | 461 | 7.2 | 722 | 11.2 | 699 | 10.9 | 36 | .6 | 2086 | 32.5 | 6425 | 10.1 |
| 4 | 85 | 1.3 | 284 | 4.4 | 599 | 9.4 | 669 | 10.5 | 29 | .5 | 1666 | 26.0 | 6399 | 10.1 |
| 3 | 50 | .8 | 214 | 3.4 | 340 | 5.4 | 552 | 8.7 | 24 | .4 | 1180 | 18.6 | 6328 | 10.0 |
| 2 | 28 | .4 | 164 | 2.6 | 208 | 3.3 | 418 | 6.6 | 20 | .3 | 838 | 13.2 | 6357 | 10.0 |
| 1 | 13 | .2 | 82 | 1.2 | 91 | 1.4 | 267 | 4.0 | 9 | .1 | 462 | 7.0 | 6629 | 10.5 |
| otal | 3451 | 5.5 | 7028 | 11.1 | 6487 | 10.2 | 5288 | 8.3 | 242 | .4 | 22496 | 35.5 | 63411 | 100.0 |

ote - The last column is the percent of the total across deciles. The other percentages are based on the total within each decile.

TABLE 5.2

Percentages of Minnesota High School Juniors
of 1967 Entering Minnesota Colleges
in Fall 1968 by MSAT Score

| MSAT-C Decile | Four-Year Liberal Arts N | % | U of M N | % | State Colleges N | % | State JC N | % | Private JC N | % | Total All Colleges N | % | 66-67 HS Juniors N | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Males | | | | | | | |
| 10 | 586 | 20.7 | 893 | 31.5 | 295 | 10.4 | 180 | 6.4 | 11 | .4 | 1965 | 69.3 | 2834 | 8.9 |
| 9 | 485 | 15.6 | 857 | 27.7 | 326 | 10.5 | 232 | 10.3 | 9 | .3 | 2000 | 64.4 | 3108 | 9.8 |
| 8 | 263 | 9.6 | 636 | 23.3 | 430 | 15.7 | 299 | 10.9 | 4 | .1 | 1632 | 59.8 | 2731 | 8.6 |
| 7 | 213 | 7.9 | 479 | 17.8 | 434 | 16.1 | 336 | 12.5 | 6 | .2 | 1467 | 54.5 | 2691 | 8.4 |
| 6 | 140 | 4.4 | 381 | 11.9 | 483 | 15.0 | 456 | 14.2 | 4 | .1 | 1464 | 45.5 | 3215 | 10.1 |
| 5 | 95 | 2.7 | 286 | 8.2 | 453 | 13.0 | 494 | 14.2 | 4 | .1 | 1332 | 38.4 | 3472 | 10.9 |
| 4 | 41 | 1.1 | 175 | 4.7 | 366 | 9.8 | 411 | 11.0 | 2 | .1 | 995 | 26.7 | 3723 | 11.7 |
| 3 | 18 | .7 | 93 | 3.4 | 150 | 5.4 | 274 | 9.9 | 5 | .2 | 540 | 19.5 | 2766 | 8.7 |
| 2 | 11 | .3 | 78 | 2.2 | 156 | 5.4 | 295 | 8.2 | 8 | .2 | 548 | 15.2 | 3613 | 11.3 |
| 1 | 7 | .2 | 38 | 1.0 | 13 | .4 | 170 | 4.6 | 9 | .2 | 237 | 6.4 | 3696 | 11.6 |
| Total | 1859 | 5.8 | 3916 | 12.3 | 3106 | 9.8 | 3238 | 10.2 | 61 | .2 | 12180 | 38.2 | 31849 | 100.0 |
| | | | | | | | Females | | | | | | | |
| 10 | 724 | 20.1 | 947 | 26.9 | 419 | 11.9 | 178 | 5.1 | 15 | .4 | 2283 | 64.9 | 3520 | 11.4 |
| 9 | 413 | 11.4 | 689 | 19.0 | 595 | 16.4 | 314 | 8.6 | 15 | .4 | 2027 | 55.8 | 3631 | 11.7 |
| 8 | 218 | 7.2 | 451 | 14.9 | 487 | 16.1 | 262 | 8.7 | 20 | .7 | 1438 | 47.5 | 3028 | 8.8 |
| 7 | 123 | 4.4 | 353 | 12.6 | 452 | 16.2 | 244 | 8.7 | 31 | 1.1 | 1203 | 43.0 | 2795 | 9.0 |
| 6 | 96 | 3.0 | 268 | 8.4 | 477 | 15.0 | 273 | 8.6 | 21 | .7 | 1135 | 35.7 | 3182 | 10.3 |
| 5 | 53 | 1.6 | 155 | 4.7 | 358 | 10.8 | 294 | 8.9 | 15 | .5 | 875 | 26.4 | 3319 | 10.7 |
| 4 | 32 | 1.0 | 103 | 3.1 | 299 | 8.9 | 237 | 7.1 | 19 | .6 | 690 | 20.6 | 3342 | 10.8 |
| 3 | 10 | .4 | 49 | 2.0 | 103 | 4.2 | 162 | 6.6 | 15 | .6 | 339 | 13.8 | 2456 | 7.9 |
| 2 | 5 | .2 | 46 | 1.6 | 89 | 3.1 | 115 | 4.0 | 18 | .6 | 273 | 9.4 | 2894 | 9.4 |
| 1 | 2 | .1 | 33 | 1.2 | 38 | 1.4 | 75 | 2.7 | 14 | .5 | 162 | 5.9 | 2767 | 8.9 |
| Total | 1676 | 7.4 | 3094 | 10.0 | 3317 | 10.7 | 2154 | 7.0 | 184 | .6 | 10425 | 33.7 | 30934 | 100.0 |
| | | | | | | | Males and Females | | | | | | | |
| 10 | 1310 | 20.6 | 1840 | 29.0 | 714 | 11.2 | 358 | 5.6 | 26 | .4 | 4248 | 66.9 | 6354 | 10.1 |
| 9 | 898 | 13.3 | 1546 | 22.9 | 921 | 13.7 | 637 | 9.5 | 25 | .4 | 4027 | 59.8 | 6739 | 10.7 |
| 8 | 481 | 8.4 | 1087 | 18.9 | 917 | 15.9 | 561 | 9.7 | 24 | .4 | 3070 | 53.3 | 5759 | 9.2 |
| 7 | 336 | 6.1 | 832 | 15.2 | 886 | 16.2 | 580 | 10.6 | 36 | .7 | 2670 | 48.7 | 5486 | 8.7 |
| 6 | 236 | 3.7 | 649 | 10.1 | 960 | 15.0 | 729 | 11.4 | 25 | .4 | 2599 | 40.6 | 6397 | 10.2 |
| 5 | 148 | 2.2 | 441 | 6.5 | 811 | 11.9 | 788 | 11.6 | 19 | .3 | 2207 | 32.5 | 6791 | 10.8 |
| 4 | 73 | 1.0 | 278 | 3.9 | 665 | 9.4 | 648 | 9.2 | 21 | .3 | 1685 | 23.8 | 7065 | 11.3 |
| 3 | 28 | .5 | 142 | 2.7 | 253 | 4.8 | 436 | 8.3 | 20 | .4 | 879 | 16.8 | 5222 | 8.3 |
| 2 | 16 | .2 | 124 | 1.9 | 245 | 3.8 | 410 | 6.3 | 25 | .4 | 821 | 12.6 | 6507 | 10.4 |
| 1 | 9 | .1 | 71 | 1.1 | 51 | .8 | 245 | 3.8 | 23 | .4 | 399 | 6.2 | 6463 | 10.2 |
| Total | 3535 | 5.6 | 7010 | 11.2 | 6423 | 10.2 | 5392 | 8.6 | 245 | .4 | 22605 | 36.0 | 62783 | 100.0 |

Note - The last column is the percent of the total across deciles. The other percentages are based on the total within each decile.

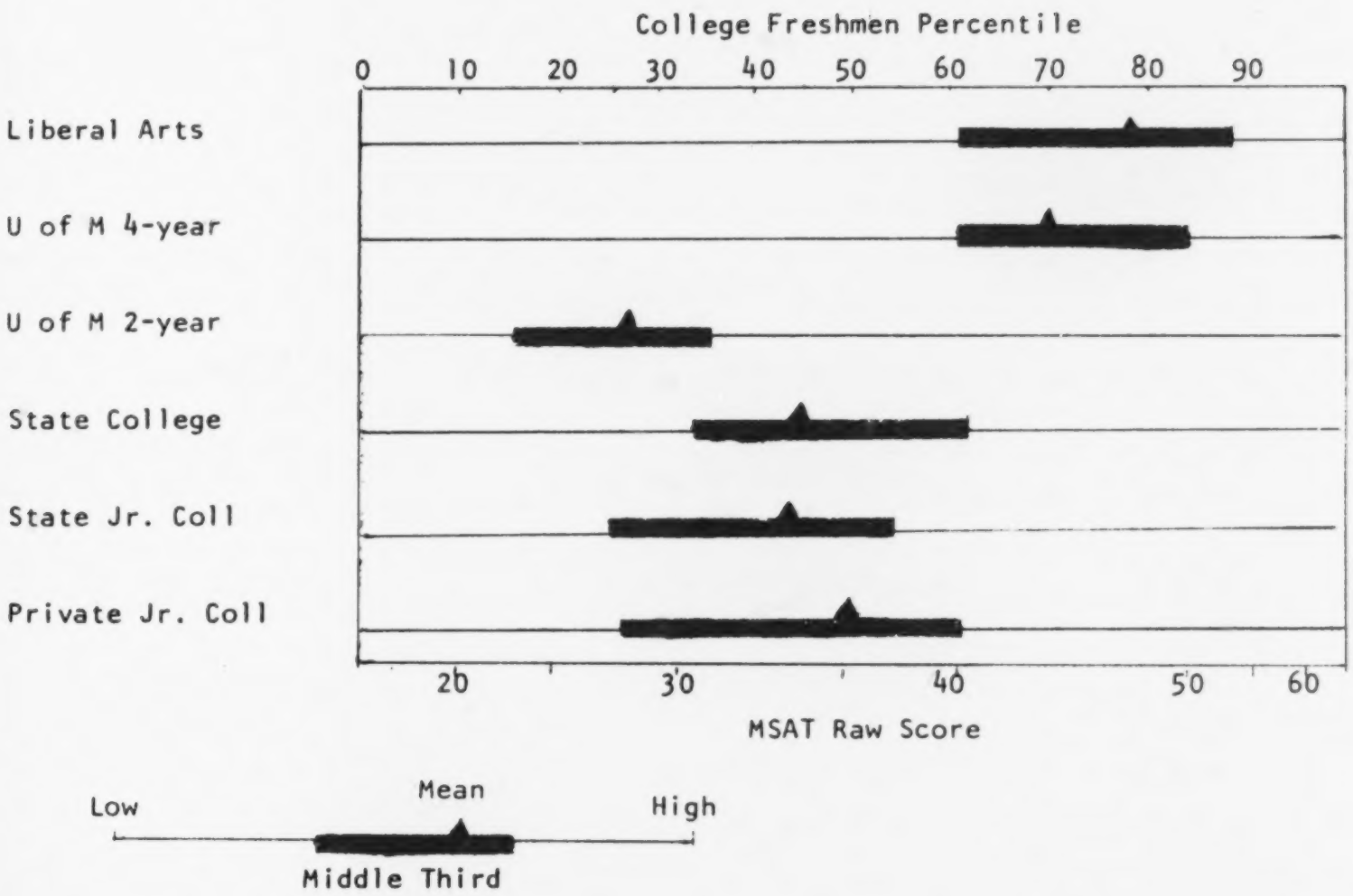


Fig. 1.1. MSAT score distributions by type of college.

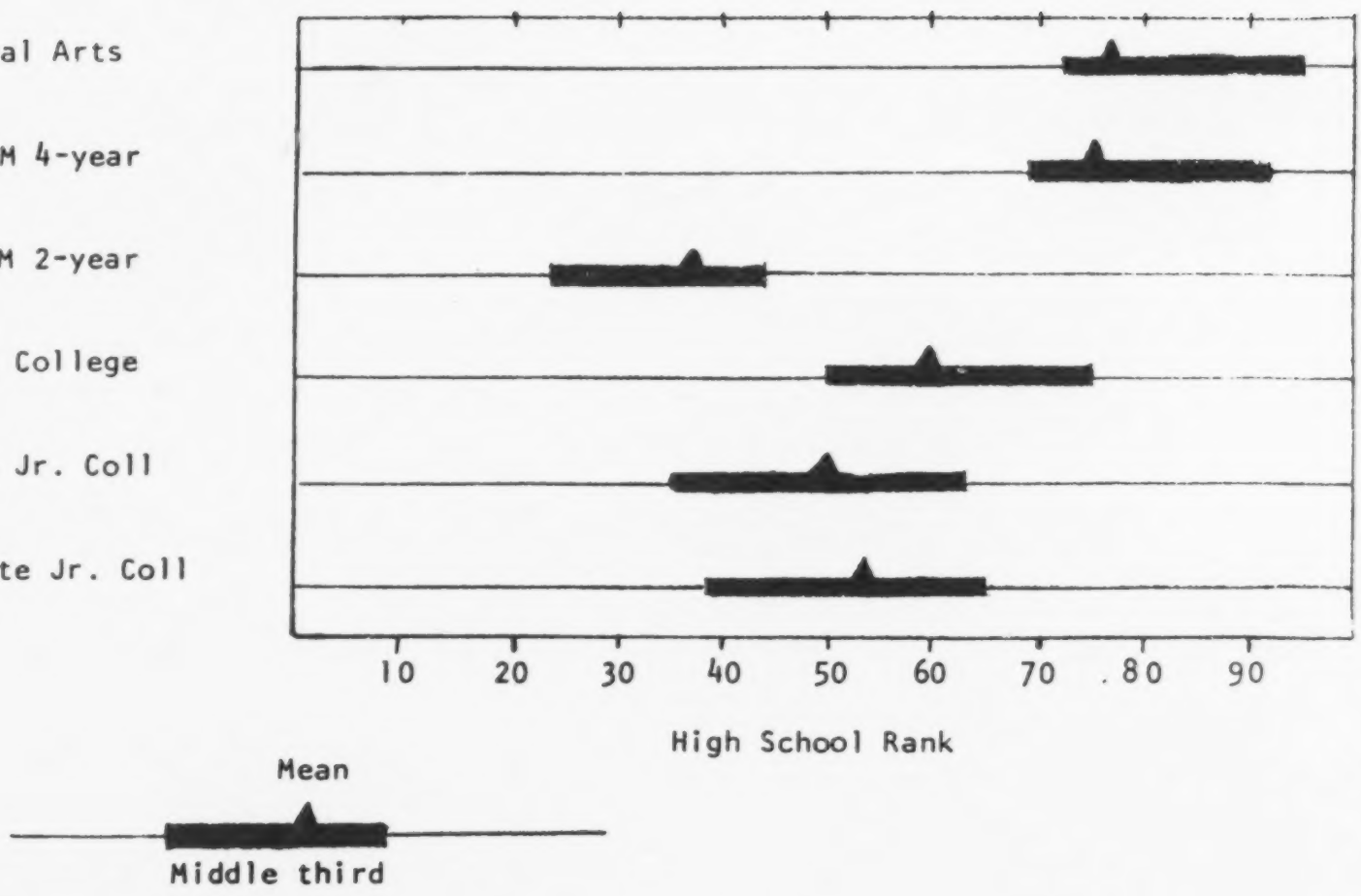


Fig. 1.2. High school rank distributions by type of college.